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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,369	04/23/2001	Francis J. Binder	CMD 215X	3826

22222 7590 02/27/2003

GEORGE R CORRIGAN  
5 BRIARCLIFF COURT  
APPLETON, WI 54915

EXAMINER
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SAINT SURIN, JACQUES M

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 02/27/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/840,369

Applicant(s)

BINDER ET AL.

Examiner

Jacques M Saint-Surin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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### DETAILED ACTION

1. This Office Action is responsive to the amendment of 12/02/02.
2. Applicant's arguments with respect to claims 1-48 have been considered but are moot in view of the new ground(s) of rejection.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-48 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-48 of copending Application No. 09/839,348. Although the conflicting claims are not identical, they are not patentably distinct from each other because the only difference between these claims is an obvious variation of word included in independent claims 1, 15, 24, 32 and 43 represented as the highlighted portions of the claims in the table below.

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## US Patent Application

09/840,369

## US Patent Application

09/839348

1. An apparatus for detecting a seal on a film, comprising; a force transmitter, disposed to transmit a force from the film; **wherein the force is created when the film moves with respect to the force transmitter;** a force sensor disposed to receive the transmitted force and provide a force signal in response thereto; and a controller, disposed to receive the force signal and provide a seal signal in response thereto.

2. The apparatus of claim 1, wherein the force sensor is an acoustic sensor.

3. The apparatus of claim 1, wherein the force sensor is a mechanical sensor.

4. The apparatus of claim 1, wherein the force sensor is a vibration sensor.

5. The apparatus of claim 1, further comprising an anvil disposed on a first side of a film path, wherein the force transmitter is disposed on a second side of the film path.

6. The apparatus of claim 1, wherein the force sensor is a piezoelectric

1. An apparatus for detecting a seal on a film, comprising; force transmitter, disposed to transmit a force from the film; a force sensor disposed to receive the transmitted force and provide a force signal in response thereto; and a controller, disposed to receive the force signal and provide a seal signal in response thereto.

2. The apparatus of claim 1, wherein the force sensor is an acoustic sensor.

3. The apparatus of claim 1, wherein the force sensor is a mechanical sensor.

4. The apparatus of claim 1, wherein the force sensor is a vibration sensor.

5. The apparatus of claim 1, further comprising an anvil disposed on a first side of a film path, wherein the force transmitter is disposed on a second side of the film path.

6. The apparatus of claim 1, wherein the force sensor is a piezoelectric

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sensor.

7. The apparatus-of claim 5, wherein the force transmitter is a quill disposed near a path of the film.

8. The apparatus of claim 6, wherein the quill is rigid.

9. The apparatus of claim 7, wherein the quill is comprised of stainless steel.

10. The apparatus of claim 6, wherein the quill is angled in a downstream film path direction, relative to normal to the film path.

11. The apparatus of claim 10, wherein the quill includes a radius surface abutting the film path, and the quill is held against the film path by a spring force.

12. The apparatus of claim 5, wherein the controller includes an amplitude comparator that receives the force signal and an amplitude threshold.

13. The apparatus of claim 5, wherein the controller includes a rise-time comparator that receives the force signal and a rise-time threshold.

sensor.

7. The apparatus-of claim 5, wherein the force transmitter is a quill disposed near a path of the film.

8. The apparatus of claim 6, wherein the quill is rigid.

9. The apparatus of claim 7, wherein the quill is comprised of stainless steel.

10. The apparatus of claim 6, wherein the quill is angled in a downstream film path direction, relative to normal to the film path.

11. The apparatus of claim 10, wherein the quill includes a radius surface abutting the film path, and the quill is held against the film path by a spring force.

12. The apparatus of claim 5, wherein the controller includes an amplitude comparator that receives the force signal and an amplitude threshold.

13. The apparatus of claim 5, wherein the controller includes a rise-time comparator that receives the force signal and a rise-time threshold.

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14. The apparatus of claim 1, wherein the controller includes a window circuit.

15. A method for detecting a seal on a film, comprising;  
**creating a force when the film moves relative to a sensor;**  
providing a force signal responsive to the seal; and detecting the force and providing a seal signal in response thereto.

16. The method of claim 15, further comprising transmitting a force from the film.

17. The method of claim 15, wherein providing the force signal includes detecting an acoustic signal.

18. The method of claim 16, wherein providing the force signal includes detecting a mechanical signal.

19. The method of claim 16, wherein providing a force signal includes sensing a vibration.

20. The method of claim 15, further comprising transmitting the force with a quill disposed near a path of the film.

21. The method of claim 15, wherein providing a seal signal includes comparing

14. The apparatus of claim 1, wherein the controller includes a window circuit.

15. A method for detecting a seal on a film, comprising; providing a force signal responsive to the seal; and detecting the force and providing a seal signal in response thereto.

16. The method of claim 15, further comprising transmitting a force from the film.

17. The method of claim 15, wherein providing the force signal includes detecting an acoustic signal.

18. The method of claim 16, wherein providing the force signal includes detecting a mechanical signal.

19. The method of claim 16, wherein providing a force signal includes sensing a vibration.

20. The method of claim 15, further comprising transmitting the force with a quill disposed near a path of the film.

21. The method of claim 15, wherein providing a seal signal includes comparing

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an amplitude of the force with a threshold.

22. The method of claim 21, wherein providing a seal signal includes making the comparison during a window.

23. The method of claim 22, wherein providing a seal signal includes comparing a rise-time of the force with a threshold.

24. An apparatus for detecting a seal on a film, comprising; means for providing a force signal in response to the seal **and a force, wherein the force is created when the film moves**; means for detecting the force signal, coupled to the means for providing a force signal; and means for providing a seal signal in response to the force signal, coupled to the means for detecting.

25. The apparatus of claim 24, further comprising means for transmitting a force from the film to the means for detecting, coupled to the means for detecting.

26. The apparatus of claim 25, wherein the means for detecting includes means for detecting an acoustic signal.

an amplitude of the force with a threshold.

22. The method of claim 21, wherein providing a seal signal includes making the comparison during a window.

23. The method of claim 22, wherein providing a seal signal includes comparing a rise-time of the force with a threshold.

24. An apparatus for detecting a seal on a film, comprising; means for providing a force signal in response to the seal; means for detecting the force signal, coupled to the means for providing a force signal; and means for providing a seal signal in response to the force signal, coupled to the means for detecting.

25. The apparatus of claim 24, further comprising means for transmitting a force from the film to the means for detecting, coupled to the means for detecting.

26. The apparatus of claim 25, wherein the means for detecting includes means for detecting an acoustic signal.

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27. The apparatus of claim 25, wherein the means for detecting includes means for detecting a mechanical signal.

28. The apparatus of claim 25, wherein the means for detecting includes means for detecting a vibration signal.

29. The apparatus of claim 25, wherein the means for providing a seal signal includes means for comparing an amplitude of the force with a threshold.

30. The apparatus of claim 29, wherein the means for providing a seal signal includes means for making the comparison during a window.

31. The apparatus of claim 30, wherein the means for providing a seal signal includes means for comparing a rise-time of the force with a threshold.

32. A machine, comprising; a force transmitter, disposed to transmit a force responsive to a seal on a bag, **wherein the force is created as the bag moves relative to the transmitter;** a force sensor disposed to-receive the transmitted force and provide a force signal in response thereto; at least one upstream

27. The apparatus of claim 25, wherein the means for detecting includes means for detecting a mechanical signal.

28. The apparatus of claim 25, wherein the means for detecting includes means for detecting a vibration signal.

29. The apparatus of claim 25, wherein the means for providing a seal signal includes means for comparing an amplitude of the force with a threshold.

30. The apparatus of claim 29, wherein the means for providing a seal signal includes means for making the comparison during a window.

31. The apparatus of claim 30, wherein the means for providing a seal signal includes means for comparing a rise-time of the force with a threshold.

32. A bag machine, comprising; a force transmitter, disposed to transmit a force responsive to a seal; a force sensor disposed to-receive the transmitted force and provide a force signal in response thereto; at least one upstream processing device, located upstream of the force



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processing device, located upstream of the force transmitter; at least one downstream processing device, located downstream of the force transmitter; and a controller, disposed to receive the force signal and provide a seal signal in response thereto.

33. The apparatus of claim 32, wherein the force sensor is a mechanical sensor.

34. The apparatus of claim 32, further comprising an anvil disposed on a first side of a film path, wherein the force transmitter is disposed on a second side of the film path.

35. The apparatus of claim 34, wherein the force sensor is a piezoelectric sensor.

36. The apparatus of claim 35, wherein the force transmitter is a quill disposed near a path of the film.

37. The apparatus of claim 36, wherein the quill is angled downstream.

38. The apparatus of claim 37, wherein the quill includes a radius surface abutting the film path, and the quill is held against the film path by a spring force.

transmitter; at least one downstream processing device, located downstream of the force transmitter; and a controller, disposed to receive the force signal and provide a seal signal in response thereto.

33. The apparatus of claim 32, wherein the force sensor is a mechanical sensor.

34. The apparatus of claim 32, further comprising an anvil disposed on a first side of a film path, wherein the force transmitter is disposed on a second side of the film path.

35. The apparatus of claim 34, wherein the force sensor is a piezoelectric sensor.

36. The apparatus of claim 35, wherein the force transmitter is a quill disposed near a path of the film.

37. The apparatus of claim 36, wherein the quill is angled downstream.

38. The apparatus of claim 37, wherein the quill includes a radius surface abutting the film path, and the quill is held against the film path by a spring force.

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39. The apparatus of claim 38, wherein the controller includes a window circuit.

40. The apparatus of claim 32, wherein one of the at least one downstream devices is registered to the seal.

41. The apparatus of claim 40, wherein one of the at least one downstream devices includes a knife.

42. The apparatus of claim 40, wherein one of the at least one downstream devices and the force transmitter are in a common tension zone.

43. A method for processing a bag, comprising:  
transporting the film from a first processing device to a seal sensing location **and past the seal sensing location;**  
providing a force signal responsive to the seal and a force at the seal sensing location, **wherein the force is created by the seal moving;**  
detecting the force and providing a seal signal in response thereto;  
transporting the film to a second processing device.

44. The method of claim 43, further comprising transmitting a force from the film.

39. The apparatus of claim 38, wherein the controller includes a window circuit.

40. The apparatus of claim 32, wherein one of the at least one downstream devices is registered to the seal.

41. The apparatus of claim 40, wherein one of the at least one downstream devices includes a knife.

42. The apparatus of claim 40, wherein one of the at least one downstream devices and the force transmitter are in a common tension zone.

43. A method for processing a bag, comprising:  
transporting the film from a first processing device to a seal sensing location;  
providing a force signal responsive to the seal at the seal sensing location;  
detecting the force and providing a seal signal in response thereto;  
transporting the film to a second processing device.

44. The method of claim 43, further comprising transmitting a force from the

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<p>45. The method of claim 44, wherein providing the force signal includes detecting a Mechanical signal.</p> <p>46. The/method of claim 43, wherein providing a seal signal includes comparing an amplitude of the force with a threshold.</p> <p>47. The method of claim 46, wherein providing a seal signal includes making the comparison during a window.</p> <p>48. The method of claim 43, wherein providing a seal signal includes comparing a rise-time of the force with a threshold.</p>	<p>film.</p> <p>45. The method of claim 44, wherein providing the force signal includes detecting a Mechanical signal.</p> <p>46. The/method of claim 43, wherein providing a seal signal includes comparing an amplitude of the force with a threshold.</p> <p>47. The method of claim 46, wherein providing a seal signal includes making the comparison during a window.</p> <p>48. The method of claim 43, wherein providing a seal signal includes comparing a rise-time of the force with a threshold.</p>
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As shown above, the difference between the claims of the two applications is an obvious variation of words relating to a functional language of the claims. Therefore, the subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 2-14, 16-23, 33-42 and 44-48 correspond exactly to the dependent to claims 2-14, 16-23, 33-42 and 44-48 of US Patent application ('048).

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kazys et al. (US Patent 5,847,281) discloses a system for measuring ultrasonically the elastic properties of a moving paper web.

Kazys et al. (US Patent 5,808,199) discloses a system for measuring ultrasonically the elastic properties of a moving paper web.

Thalmann (US Patent 6,131,452) discloses a process and device for detecting structural faults of moving flat textile materials.

Houghton et al. (US Patent 4,991,432) discloses a sensor and system for continuous determination of sheet characteristics.

Horand (US Patent 4,580,438) discloses a method and apparatus for testing the duplicating characteristics of pressure-sensitive duplicating sheets.

De Jager et al. (US Patent 5,649,569) discloses a warp tension measuring apparatus.


Cornelius (US Patent 6,028,318) discloses print media weight detection system.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques M Saint-Surin whose telephone number is (703) 308-3698. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

  
Jacques M. Saint-Surin  
February 23, 2003

HELEN KWOK  
PRIMARY EXAMINER  
